

**Nomad**

SERVICE BULLETIN

SUBJECT: CORROSION PROTECTION OF INBOARD FUEL TANK SUMP AND
FERRY TANK SUMP (OPTION G41)

1. Planning Information

A. Effectivity

(1) Aircraft Affected

All Nomad N22-Series and N24-Series aircraft whose log books do not already record the embodiment of Mod N620 or compliance with Service Bulletin NMD-28-15.

Pre-certification implementation of the intent of this Service Bulletin is recorded in the Airframe log book as Mod N620.

(2) Spares Affected

<u>Part Number</u>	<u>Title</u>	<u>Recommended Disposition</u>
1/N-57-290	Sump Assembly, Inboard	Rework as per Para 2

B. Reason

To prevent the formation of corrosion on the interior surface of the inboard fuel tank sump assembly.

C. Description

The sump assemblies of the inboard fuel tanks, and that of the ferry tank (Option G41) if installed or removed, are examined internally for corrosion. Any corrosion found is to be removed and the repaired areas treated with a protective coating of Alodine 1200S. The internal surface of the sumps are then coated first with a fuel resistant polysulphide based sealant (Spec MIL-S-8802) eg PR1422A, which is allowed to cure and then coated again with sealant PR1005L or suitable alternative. In addition the sump reinforcing ring P/N 1/N-57-110, boost pump rubber gasket (2 off) P/N 1/N-57-182 and the sump gasket P/N 1/N-57-207 are wet assembled to the sump with PR1422A or suitable alternative.

D. Compliance

Incorporation of the modification described in this Service Bulletin is recommended.

E. Approval

The modification detailed herein has been approved pursuant to Air Navigation Regulation 40 and conforms with the type certification requirements.

F. Manpower

2 manhours per sump after sump has been removed from the tank. If PR1422 A-2 sealant is used, allow 72 hours for sealant to cure,, if PR1422A-1/2 is used 48 hours should be allowed for curing. Sealant PR1005L has a curing time of 4 hours.

G. Material - Price and Availability

Ref Para 3.A.

H. Tooling - Price and Availability

None required.

J. Weight and Balance

Negligible effect.

K. References

MM - Maintenance Manual
IPC - Illustrated Parts Catalogue
SRM - Structural Repair Manual

L. Publications Affected

MM
IPC

2. Accomplishment Instructions

- A. Remove the inboard fuel tank sumps (Ref MM 28-10-00).
- B. Remove the fuel boost pumps from the sumps (Ref MM 28-20-00).
- C. Inspect the internal surface of the sump for signs of corrosion. Light surface corrosion may be removed with a fine grit abrasive paper. Where isolated pin hole corrosion is present, first remove surrounding surface corrosion then drill out the pin holes and fill holes with suitable sized solid rivets. Where corrosion is severe the sump should be scrapped and replaced with a new item.
- D. When the corrosion has been removed and holes drilled for blanking rivets, the sump is to be degreased and prepared for an anti-corrosive treatment of Alodine 1200S (Ref SRM 51-30-00).

- E. Apply a protective coating of Alodine 1200S to those parts of the sump internal surface where bare metal has been exposed.
- F. Blank off drilled holes with rivets of suitable size and material. Touch up rivets with Alodine 1200S by brush coating (Ref SRM 51-30-00).
- G. Prepare the PR1422A-1/2 sealant in accordance with the manufacturer's instructions. Using a brush apply a thin even coating to all internal surfaces of the sump which are wetted by fuel. Allow sealant to cure for 48 hours.

NOTE: If PR1422A-1/2 sealant is not available, PR 1422A-2 may be used but the curing time for the -2 sealant is 72 hours.

- H. Apply the PR1005L sealant in accordance with the manufacturer's instructions and using the "fill and drain" method, cover the cured coating of PR1422A-1/2 sealant over the internal surface of the sump. Curing time for PR1005L sealant is 4 hours.

NOTE: The "fill and drain" method entails filling the sump to as high a level as is practicable and then slowly rotating the sump in a manner to achieve a uniform coating over the internal surface. When the internal surface is completely coated the excess sealant is drained and the sump again rotated until the coating has dried and set sufficiently not to run when the sump is stationary.

- J. Refit the fuel boost pumps to the sump (Ref MM28-20-00), wet assembling the pump gaskets (Ref IPC 28-20-01 item 71) with PR 1422A-1/2. Re-identify the sump assembly Part No. to 2/N-57-290/NMD-28-15.

- K. Refit the sump to the inboard fuel tank (Ref MM28-10-00).

NOTE: 1. The sump reinforcing ring is to be fitted with the chamfer against the sump flange.

- 2. The mating surfaces of the reinforcing ring to sump and sump to sump gasket are to be coated with PR1422A-1/2 sealant on assembly.

Remove excess sealant after sump is assembled to the tank.

3. Material Information

A. Parts Required Per Aircraft

The following items are to be obtained from the Operators stocks or from local sources.

<u>Item P/N</u>	<u>Title</u>	<u>Qty</u>
-	Abrasive Paper	AR
-	Alodine 1200S	AR
-	PR1422A-1/2 Sealant) PRC Corp.	AR
Alt	PR1422A-2 Sealant) 5454 San Fernando Rd. Glendale, California 91209 USA	AR
Alt	PR1422-A2 Sellys Chemical Co Pty Ltd 1 Gow Street Bankstown 2200 NSW AUSTRALIA	AR
Alt	Pro-Seal 890-2 Coast Pro-Seal 19451 Susana Rd Compton California 90221 USA	AR
-	PR1005L PRC Corp 5454 San Fernando Rd Glendale California 91209 USA	AR

B. Parts Modified and Re-identified by Operator

<u>Old P/N</u>	<u>Title</u>	<u>P/N After Rework</u>
1/N-57-290	Sump Assembly	Add S/B No. NMD-28-15 adjacent to component P/N.

C. Parts Required to Modify Spares

As in Para 3.A.

D. Removed Parts

Nil.

E. Special Tools and Equipment

Nil.

4. Recording Action

Record compliance with Service Bulletin NMD-28-15 in the airframe log book.